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EXAMINER

FISCHMANN, BRYAN R

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,813

Applicant(s)

LONG, DAVID M.

Examiner

Bryan Fischmann

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) 1-45 and 66-69 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 45-47, 50-57 and 60-64 is/are rejected.
- 7) ☐ Claim(s) 48, 49, 58, 59 and 65 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Acknowledgments

1. The Amendment and Drawing Corrections (paper 6) has been entered.

Election/Restriction

2. Paper 3 required a species election between 7 species. The reply to paper 3 (paper 4) included an election to prosecute species V, claims 46-65. As noted in the last Office Action (paper 5), claims 1-45 and 66-69 remain withdrawn from prosecution. Since the Applicant did not say in paper 4 whether the election is made with or without traverse, the election is treated as being made without traverse.

Due to this, it is requested Applicant cancel claims drawn to the non-elected species, unless they are made to depend, when possible, at Applicant's discretion, upon an allowable generic claim.

3. An action on the merits of species V (claims 46-65) follows.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 57 and 62 and rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 1-146568.

Japanese Patent 1-146568 teaches an apparatus for improving human mobility on congealed precipitation by utilizing a snow-traveling device (4), the snow-traveling

device having a first end (front of apparatus on Figure 3), a second end (back of apparatus on Figure 3) and a contacting surface (surface on Figure 3 opposite that onto which reference number 1 is applied), said apparatus comprising:

friction enhancement means (1) for enhancing friction between the contacting surface of said snow-traveling device and the congealed precipitation (see comments below);

a first side (lower surface of reference number 1 on Figure 1) provided on the friction enhancement means adapted for making contact with the snow-traveling device;

a second side (upper surface of reference number 1 on Figure 1) provided on the friction enhancement means for contacting the congealed precipitation surface; and

means for adhering (2) the first side of said friction enhancement means to the contacting surface of the snow-traveling device (see comments below) to increase the friction between the snow-traveling device and the congealed precipitation to improve mobility of the snow-traveling device on the congealed precipitation.

Regarding claim 62, see the English Language Abstract.

The limitations in the claim 57 beginning with the word "means" followed by the word "for" are understood to invoke 35 USC 112 6th paragraph. Due to this, the above limitations will be understood to include all "means" disclosed in the specification and their equivalents. The "short fibers" taught by Japanese Patent 1-146568 are an equivalent to the friction enhancing means taught by the Instant Application, as they perform the same function.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3618

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 46 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 1-146568.

Japanese Patent 1-146568 teaches a method (see comments below) of applying a friction enhancing material (1) to a snow-traveling device (4), said snow-traveling device having a first surface (surface on Figure 3 opposite that onto which reference number 1 is applied) for engaging a human and a second contacting surface (surface onto which reference number 1 is applied) for contacting a congealed precipitation surface, said friction enhancing material comprising a first side and a second side (Figure 1), said method comprising the steps of:

interposing an adhesive (2 - English Language Abstract) between the second contacting surface of the snow-traveling device and the first side of the friction enhancing material to releasably adhere (see comments below) the friction the friction enhancing material to the snow-traveling device.

Japanese Patent 1-146568 fails to explicitly state the steps of "preparing the snow-traveling device for receiving the friction enhancing material onto the second contacting surface of said snow-traveling device", "preparing the friction enhancing material for application onto the snow-traveling device" and "applying pressure to the second side of the friction enhancing material to thereby install the friction enhancing material onto the second contacting surface on the snow traveling device".

However, the following is noted:

1) Regarding the step of "preparing the snow-traveling device for receiving the friction enhancing material onto the second contacting surface of said snow-

Art Unit: 3618

traveling device", this step may be nothing more than manually cleaning-off any dirt or snow that may be on the surface of the snow-traveling device. The Examiner takes Official Notice that it is known to an ordinary person that before two surfaces are joined by adhesives that the surfaces should be free of any foreign material. Foreign material on surfaces to be joined by adhesives will likely adversely affect the bond of the adhesives.

2) Regarding the step of "preparing the friction enhancing material for application onto the snow-traveling device", this step may also be nothing more than manually cleaning-off any dirt or snow that may be on the surface of the friction enhancing material, or simply unpacking the "friction enhancing material" from its storage location. The Examiner takes Official Notice that it is known to an ordinary person that before two surfaces are joined by adhesives that the surfaces should be free of any foreign material. Foreign material on surfaces to be joined by adhesives will likely adversely affect the bond of the adhesives.

3) Regarding the step of "applying pressure to the second side of the friction enhancing material to thereby install the friction enhancing material onto the second contacting surface on the snow traveling device", the Examiner takes Official Notice that it is known to an ordinary person that after adhesives are applied to two surfaces to be joined that pressure, such as may be applied by a clamp, or manually, is usually necessary to insure a proper bond of the two surfaces. Lack of applying pressure to two surfaces to be joined by adhesives often results in the two surfaces separating, thereby preventing a bond, or resulting in a "marginal" bond between the two surfaces.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare the snow-traveling device of Japanese Patent

Art Unit: 3618

1-146568 for receiving the friction enhancing material onto the second contacting surface of said snow-traveling device, to prepare the friction enhancing material of Japanese Patent 1-146568 for application onto the snow-traveling device and apply pressure to the second side of the friction enhancing material of Japanese Patent 1-146568 to thereby install the friction enhancing material onto the second contacting surface on the snow traveling device.

Regarding the method of applying a friction enhancing material to a snow traveling device recited in claim 46, it is the Examiner's position that it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the claimed method of taught by Japanese Patent 1-146568. Because the prior art discloses all the structure necessary to perform the claimed functions, one of ordinary skill in the art would find the claimed method to be an obvious step in light of the disclosed structure. See MPEP §2112.02. See also *In re King*, 801 F2d 1324, 1326; 231 USPQ 136, 138 (Fed Cir 1986).

Regarding claim 50, the Examiner takes Official Notice that it is known to use a "gelatinous" or "spray" adhesive. These types of adhesive may be purchased at any large "home repair" store, such as "Home Depot". Spray, or gelatinous adhesive are advantageous in that they may be readily applied to a surface.

Regarding claim 51, note that any two surfaces which are "affixed", may be "released", or separated with varying degrees of difficulty.

Note that the above "instances" of Official Notice, with the exception of claim 50, are repeated from the last Office Action (paper 5). Since Applicant did not seasonally traverse the above instances of Official Notice, the above instances of Official Notice, with the exception of claim 50, are now considered to be admitted prior art. See Section 2144.03 of the MPEP.

Art Unit: 3618

Regarding claim 52, see the rejection for claim 46.

8. Claims 46 and 50-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent 4309488.

German Patent 4309488 teaches a snow-traveling device comprising a friction enhancing material (3') held to a second contacting surface by adhesive (4).

German Patent 4309488 fails to explicitly teach a method of applying the friction enhancing material as set forth in claim 46.

However, as noted in the previous 103 rejection of claim 46, the steps of preparing the snow-traveling device and the friction enhancing material as set forth in claim 46 may be nothing more than a manual cleaning of the surfaces. Manual cleaning of the surfaces facilitates adhesion of the friction enhancing material to the snow-traveling device. Regarding the steps of interposing an adhesive between the second contacting surface of the snow-traveling device and the first side of the friction enhancing material and applying pressure to the second side of the friction enhancing material to install the friction enhancing material onto the second contacting surface, note that it would have been obvious to an ordinary person that to correctly and best install an adhesive between two contacting parts, that pressure, such as might be provided by a clamp, should be applied.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the method of claim 46 is taught by German Patent 4309488.

Also regarding the method of claim 46, it is the Examiner's position that it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the claimed method of German Patent 4309488. Because the prior art

Art Unit: 3618

discloses all the structure necessary to perform the claimed functions, one of ordinary skill in the art would find the claimed method to be an obvious step in light of the disclosed structure. See MPEP §2112.02. See also *In re King*, 801 F2d 1324, 1326; 231 USPQ 136, 138 (Fed Cir 1986).

Regarding claim 50, the Examiner takes Official Notice that it is known to utilize double-sided adhesive tape to join two surfaces. Double-sided adhesive tape is an easy, and relatively "mess-free" way to join two surfaces, as there is no "liquid" adhesive that must be applied, which could inadvertently find its way onto the applier's hands, or unwanted places on the parts being joined. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize double-sided adhesive tape apply the friction enhancing material of German Patent 4309488. Further note that Applicant admits on lines 19-21 of sheet 45 that the use of "double-sided" tape is known to those of ordinary skill in the art. Note that per Section 2129 of the MPEP that admitted prior art by Applicant is available against the claims.

Regarding claim 51, note that any two surfaces which are "affixed", may be "released", or separated with varying degrees of difficulty.

Regarding claim 52, see the rejection for claim 46.

Regarding claim 53, the comments regarding the use of "double-sided adhesive tape" in claim 50 also apply to claim 53. Regarding the claim 53 recitation "...a roll having an outside diameter less than about four inches", the Examiner takes Official Notice that rolls of double-sided tape of "about four inches" are known to those of ordinary skill in the art. A roll of "about four inches" could be met by a "roll" utilized that

Art Unit: 3618

is larger, or smaller than 4 inches, or was originally much larger than four inches, but has been partially "used-up" so that it is now "about" 4 inches.

Regarding claims 54 and 55, see the rejection for claim 46.

Note that the above "instances" of Official Notice are repeated from the last Office Action (paper 5). Since Applicant did not seasonally traverse the above instances of Official Notice, the above instances of Official Notice are now considered to be admitted prior art. See Section 2144.03 of the MPEP.

9. Claims 47 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 1-146568 in view of Sutherland, US Patent 6,105,990.

Japanese Patent 1-146568 fails to teach the friction enhancing material further comprises a woven slant pile pattern.

However, the English Language Abstract of Japanese Patent 1-146568 teaches that the friction enhancing material comprises a "fabric". Lines 35 and 36 of column 1 of Sutherland recites "Climbing skins have now been replaced by woven fabrics with a slant pile hereby referred to as 'climbing fabric'. Fabrics are generally "woven", as that is how they are formed. Fabrics composed of fibers are also stronger when the fibers are "interwoven", as opposed to being "discretely formed", as taught by Japanese Patent 1-146568, as the "weave" resists deformation of the material.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a woven slant pile pattern for the fabric of Japanese Patent 1-146568, as taught by Sutherland.

Regarding the recitation of a "first dimension" and a "second dimension" in claim 61, these two dimension may be arbitrarily selected as two segments along the length of the apparatus. Since Sutherland teaches that the fabrics are woven, but makes no mention of the "weave" changing along the length of the apparatus, it would have been

Art Unit: 3618

obvious to one of ordinary skill in the art at the time the invention was made that the "woven pattern" is the same when viewed in the direction of the first direction or the second direction.

10. Claims 56 and 64 rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 1-146568, in view of Held, et al, US Patent 2,162,888.

Japanese Patent 1-146568 fails to teach a fastener at a first end of the friction enhancing material adapted for fastening the friction enhancing material to the snow-traveling device.

However, Held teaches a fastener (2) adapted for fastening a first end of fastening friction enhancing material (1) to a snow-traveling device (27). A fastener for fastening friction enhancing material to a snow-traveling device is advantageous in that the fastener provides a "strong" and "reliable" method of joining the friction enhancing material to the snow-traveling device. This is especially important at the "first end" or front of the friction enhancing material, as the front, or "leading edge" of the friction enhancing material is where separation from the snow traveling device is most likely to occur, as this is where the friction enhancing material will experience the largest forces.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a fastener adapted for fastening a first end of the fastening friction enhancing material to the snow-traveling device of Japanese Patent 1-146568, as taught by Held.

11. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 1-146568.

Japanese Patent 1-146568 fails explicitly state that "droplets" protrude out from the friction enhancement means.

Art Unit: 3618

However, when the apparatus is used in wet snow, or when the apparatus is used on snow and it is raining, "droplets" will protrude out from the friction enhancement means, as the friction enhancement means, when used under these conditions will become saturated with water. When "gravity" and "dynamic forces" caused by use of the snow traveling device force some of the water out of the friction enhancement means, the surface tension of the water will cause the water to form into "droplets", which will "protrude" out from the friction enhancement means.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that when the apparatus is used in wet snow, or when the apparatus is used on snow and it is raining, "droplets" will protrude out from the friction enhancement means of Japanese Patent 1-146568.

Note that the above rejection is partially based on reliance on "Scientific Theory". See Section 2144.02 of the MPEP.

12. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 1-146568.

Japanese Patent 1-146568 fails to teach that the adhesive (2) is spray or gelatinous adhesive.

Regarding claim 63, the Examiner takes Official Notice that it is known to use a "gelatinous" or "spray" adhesive. These types of adhesive may be purchased at any large "home repair" store, such as "Home Depot". Spray, or gelatinous adhesive are advantageous in that they may be readily applied to a surface.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize gelatinous or spray adhesive to apply the friction enhancing material of Japanese Patent 1-146568.

Allowable Subject Matter

13. Claims 48, 49, 58, 59 and 65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Applicant's Remarks (paper 6) and Examiner's Comments

14. As previously noted in this Office Action, the Applicant is requested to cancel claims drawn to a non-elected species, or, where possible, at Applicant's discretion, make the claims drawn to a non-elected species dependant upon an allowable generic claim.

15. The amendment (paper 6), including Applicant's comments, resolved all specification and claim objections made on the first Office Action (paper 5).

16. The amendment, including Applicant's comments and additional drawing figures 22-24 resolved all drawing objections made on the first Office Action.

17. The amendment, including Applicant's comments, resolved the 35 USC 101 and 112 2nd paragraph rejections made on the first Office Action.

18. Applicant traversed the 103 rejection of claims 50 and 53 made on the first Office Action on pages 32 and 33 of paper 6. After consideration of Applicant's remarks, the rejection of claims 50 and 53 made on the first Office Action are withdrawn. However, as noted, a new grounds of rejection of claims 50 and 53 are set forth in this Office Action. Accordingly, this action is made non-final.

Art Unit: 3618

19. After consideration of Applicant's remarks, other 102 and 103 rejections set forth in the last Office Action are repeated in this Office Action. Applicant's arguments against these rejections made in the "Remarks" section of the amendment and the Examiner's response follows:

A) Applicant's remark - On pages 28-30, the Applicant traverses the 102 rejection of claims 57 and 62 as being anticipated by Japanese Patent 1-146568. In support, the Applicant notes that the means plus function recitation in claim 57 invokes 35 USC 112 6th paragraph and recites "...the Japanese patent reference makes no disclosure of a fabric of any kind...".

Examiner's response - The Examiner offers the following comment:

(1) Claim 57 recites "...friction enhancement means for enhancing friction between the contacting surface of said snow-traveling device and the congealed precipitation...".

(2) While it is noted that Applicant teaches a fabric and Japanese Patent 1-146568 teaches short fibers, as noted by Applicant on page 28 of paper 6, note that 35 USC 112 6th paragraph specifies that the means plus functional recitation in a claim will be construed to cover the corresponding structure set forth in the specification and equivalents thereof.

It is the Examiner's position that the short fibers taught by Japanese Patent 1-146568 to enhance friction is an equivalent to the fabric taught by the Applicant to enhance friction in that they both perform the same function (friction enhancement), thereby they are functionally equivalent.

Art Unit: 3618

This is analogous to a situation where "fastening means" is claimed and a nail, or screw are disclosed. However, glue could be considered to be an equivalent, though not disclosed, as it performs the same function, namely, it provides a "means to fasten".

(3) Note that the Applicant on the lower portion of page 48 of the specification in discussing "friction enhancement means", recites "...other suitable arrangements known...to those skilled in the art, may be used and are within the scope of the present invention".

Note that the short fibers of Japanese Patent 1-146568 are known, and therefore from the recitation on page 48, it is best understood that Applicant would then be admitting that the short fibers of Japanese Patent 1-146568 are within the scope of the present invention, and therefore anticipate the present invention.

B) Applicant's remark – On page 32, regarding claim 51, the Applicant recites "...the Japanese patent reference... does not teach that the short fibers can be releasably affixed to the sliding surface...".

Examiner's response - The Examiner offers the following comment:

(1) As noted in this and the first Office Action, anything that may be "affixed", may also be removed with varying degrees of difficulty. The Applicant has not claimed the level of difficulty.

This comment also applies to claim 55.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Champlin – teaches a friction enhancing device for a snow traveling device
(Figure 4)

B) Swiss Patent 118246 – teaches a friction enhancing device for a snow traveling device

C) Swiss Patent 479205 – teaches a friction enhancing device for a snow traveling device

D) Swiss Patent 173785 – teaches a friction enhancing device for a snow traveling device

E) Swiss Patent 223797 – teaches a friction enhancing device for a snow traveling device

F) German Patent 197808 – teaches a protective layer for a ski that is unrolled and applied


G) German Patent 3039898 – teaches a friction enhancing device for a snow traveling device

21. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bryan Fischmann whose telephone number is (703) 306-5955. The examiner can normally be reached on Monday through Friday from 7:30 to 4:00.

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Brian Johnson, can be reached on (703) 308-0885. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Art Unit: 3618

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

 11-21-3
BRYAN FISCHMANN
PATENT EXAMINER